



ATTACHMENT B

REMARKS

By this amendment, Applicants have amended the claims in an effort to overcome additional minor objections pointed out by the Examiner so as to move this case towards an allowance. In particular, minor amendments have been made to Claim 1 which now refers to the sequence of the Map10 protein, namely SEQ ID NO: 2, and Claim 8 has been amended to delete the language relating to antibody fragment and now refers to those antibodies recognizing the same epitopes as those recognized by an antibody which binds to the Map10 protein which would inherently include antibody fragments which accomplish the same result. Claim 18 has now been amended to delete the language deemed objectionable by the Examiner, and Claim 32 has been amended to correct the reference to the variable heavy sequence. Other wording changes to the claims include amending the article "a" or "an" to "the" as suggested by the Examiner. Finally, Claims 2, 3 and 23 have been canceled without prejudice. In light of the fact that the monoclonal antibodies as claimed in the present application are clearly not disclosed or suggested in the prior art, Applicants submit that the present application is in condition for immediate allowance.

In the Official Action, the Examiner included several minor objections including an indication that certain claims needed to be amended the use the word "the" instead of "a" or "an", and these amendments have been made in accordance with the Examiner's suggestions. In addition, the Examiner referred to the use of trademarks on pages 9, 10 and 28 of the application, and Applicants did not see any of the terms specified by the Examiner and thus did not see any references to trademarks on these

pages which needed amendment. Finally, Applicants have utilized the phrase "isolated or purified" in accordance with the Examiner's suggestions to overcome objections under 35 U.S.C. §101. Other objections or rejections are discussed further below.

In the Official Action, the Examiner objected to Claim 8 on several bases, and without addressing these arguments herein, Applicants have overcome said objections in the present amendments to Claim 8 which remove the language deemed objectionable by the Examiner.

In the Official Action, the Examiner rejected Claims 2, 3, 8 and 18 under 35 U.S.C. §112, first paragraph, and Claims 2, 3 and 18 with regard to enablement. While Applicants contests the Examiner's arguments, in order to expedite an allowance of this application, those rejections have become moot by the cancellation of Claims 2 and 3, and the amendments to Claims 8 and 18 to remove the language deemed by the Examiner to give rise to the rejections. It is submitted that in light of the present amendments, Claims 8 and 18 are now free of the prior rejections and considered proper in all respects under 35 U.S.C. §112.

In the Official Action, the Examiner rejected Claims 1-4, 6-12, 14, 18 and 23-24 under 35 U.S.C. §103(a) as unpatentable over the Hook et al. patent, US 5,648,240 which is directed to the full Map protein and not the Map10 protein of the present claims, in light of view of the Kohler and Milstein Nature article relating to monoclonal antibodies. In this rejection, the Examiner once again incorrectly states that the Hook et al. patent discloses antibodies that bind the Map10 protein. This is not the case, nor can the Examiner point to any passage in Hook patent which discloses or suggests that antibodies were raised to the Map10 protein.

Indeed, the Examiner's own argument is to the contrary. In particular, the Examiner asserts that:

"It is well known that the Western immunoblot is a method that identifies antibodies against proteins **of a precise molecular weight** where the antigen is exposed using a radioisotope-labeled antibody. Thus the antibodies bind to the Map10 protein."

Official Action, at Page 16, emphasis added. The Examiner seems to have failed to realize that the full Map protein, which is recognized by the antibody disclosed in the Hook patent, is a much larger protein than Map10 with a molecular weight of about **five to six times** that of the Map10 protein. As reflected in the present claims, the sequence of the Map10 protein shows that it is only 131 amino acids, and thus is much smaller than the full Map protein which is **689 amino acids**. See SEQ ID NO:2 in the '240 patent. Thus, the Examiner has shown that the antibodies in the Hook '240 patent **could not** have bound to the Map10 protein since this protein has a molecular weight which is totally different from the full Map protein. Accordingly, the Hook '240 patent simply does not disclose **any** antibody which binds to the Map10 protein, much less any monoclonal antibody as claimed in the present application, and thus the Examiner's rejection should be withdrawn on this basis alone.

In addition, there is no disclosure or suggestion in the Hook '240 patent at all with regard to the Map10 protein, and thus no motivation for one to have attempted to make a monoclonal antibody from this region at all. Clearly, if a protein or region is not even disclosed or suggested in a particular reference, there is no motivation or suggestion to make a monoclonal antibody to that protein or region regardless of whether one skilled

in the art would have been able to have used the tools necessary to come up with such a monoclonal antibody.

Moreover, as set forth in Applicants' specification, Applicants have achieved the surprising and unexpected result of an effective monoclonal antibody to Map10 which has shown the ability to significantly prevent bacteremia mediated death in mice, as shown in the Examples of the present specification (see, e.g., Example 3). The presently claimed invention obtains unexpected and significant beneficial results over the prior art, and thus is patentable over the cited combination of references for this reason as well.

Accordingly, the Examiner's rejection on the basis of the Hook '240 patent in combination with Kohler and Milstein, insofar as applied to the claims as amended, is respectfully traversed and should be withdrawn.

Applicants' review of the Official Action indicates that the Examiner has not made any substantive rejections of Claims 25, 26, 31 and 32, and thus Applicants presume that the subject matter of these claims is allowable. In addition, it is similarly presumed that the subject matter of Claim 30 is considered allowable other than the deposit issue which Applicants are in the process of addressing.

In light of the amendments and arguments as set forth above, Applicants submit that the present application overcomes all prior rejections and has been placed in condition for allowance. Such action is earnestly solicited.

END OF REMARKS